ORDINANCE NO 1992- 13

AN ORDINANCE SETTING SANITARY SEWER USER RATES AND DECLARING AN EMERGENCY

Whereas, on October 14, 1992, the Village Council of MARENGO, adopted Ordinance No. 1992-13 replacing and repealing Ordinance 1992-04.

Be it ordained by the Council of the Village of MARENGO, Morrow County, State of Ohio:

PART A

SECTION 1:

Whereas, the Village of Marengo is constructing a Wastewater Collection System and Treatment Plant for sanitary sewers.

And all original users have had service available at their property since April 1, 1992,

And whereas the Village Council finds that it is necessary to bill users at a standard monthly rate, as set forth in the User Charge System as a portion of the Specifications for the Marengo Wastewater Project, and said User Charge System is attached hereto marked as Exhibit A, and made a part hereof, and with the passage of this ordinance, shall be considered as an adopted portion of the ordinances of the Village of Marengo, Ohio.

SECTION 2:

THEREFORE, THE VILLAGE COUNCIL HEREBY SET SANITARY SEWER RATES AS FOLLOWS:

1. Rates per month per "EDU", due on the 1st day of the month for that month are follows:

| 1. | O M & R Rate | - | \$14.53 | |
|----|-------------------|---|---------|--|
| 2. | Debt Service Rate | - | \$18.97 | |
| 3. | Additional Fee* | - | \$ 5.00 | |
| | TOTAL | | \$38.50 | |

^{*} This fee may be deducted is paid by the 15th of the month in which due.



2. There is an additional fee of 2% per month (24% per annum) for sums not paid by the last day of the calendar month for which it is due.

PART B

SECTION 1: That it is found and determined that all formal actions of this Council concerning and relating to the adoption of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and any of its committees that resulted in such formal action, were in meetings open to the public in compliance with all legal requirements, including Ohio Revised Code Section 121.22.

SECTION 2: This Ordinance is declared to be an emergency measure necessary for the immediate preservation of the public health and safety, and for the further reason that an emergency exists in the usual daily operation of the various departments in the municipal government, and the collection of fees for the use of the sewage system are necessary to service said system and the debit for it, and further, this Council deems it imperative that an immediate action be taken to ensure continued usual daily operation of the various departments of the municipal government, and said Ordinance shall, and therefore, be effective upon its date of passage and approval by Mayor, provided it receives an affirmative vote of 3/4ths (three-fourths) of the members elected to the Council of the Village of MARENGO; otherwise, it shall take effect and be in full force on the earliest period allowed by law.

DATED: OCTOBER 14

1992

ATTEST:

Robert Gale Mayor

Eléanor Keener, Village Clerk/Treasurer

ENHOR A

USER CHARGE SYSTEM

VILLAGE OF MARENGO, OHIO

WASTEWATER PROJECT

April, 1992

REVISED: October, 1992

A. General

As part of the implementation of the Village of Marengo Wastewater Project (C390876-02), the Village has undertaken the development of a User Charge System utilizing the following guidelines:

- The User Charge System must result in the distribution of the cost of operation and maintenance of treatment works within the grantee's service area to each user (or user class) in proportion to such user's contribution to the total wastewater loading of the treatment works.
- For the first year of operation, operation and maintenance costs shall be based upon past experience for existing treatment works or some other rational method that can be demonstrated to be applicable.
- 3. The grantee shall review user charges annually and revise them periodically to reflect actual treatment works operation and maintenance provided by the grantee.
- 4. The User Charge System must generate sufficient revenue to offset the cost of all treatment works operation and maintenance provided by the grantee.
- 5. The User Charge System must be incorporated in one or more municipal legislative enactments or other appropriate authority.

The Village is to construct a wastewater collection and treatment system comprised of a Small Diameter Gravity collection system and an Extended Aeration WWTP. The WWTP design flow of 0.04 MGD will serve 166 equivalent users as follows:

| User Type | ADF (mgd) | # Users | #Equivalent Users |
|---------------------------|-----------|---------|-------------------|
| Residential Commercial | 0.027 | 120 | 120 35 |
| Institutional | 0.005 | 35 | 24 |
| | 0.04 | 158 | 179 |

Since the Village does not have a central waste system, the user charge system will be based on a flat rate monthly billing by equivalent user, with a residential unit established as one (1) equivalent user. There are eight (8) multiple benefit users equaling forty-six (46) equivalent users.

B. Annual Wastewater Facilities Costs - OM&R

The proposed first year OM&R budget for the Village Wastewater System is as follows:

| 0 | Labor (Contract) | \$18,000 |
|---|--------------------|----------|
| 0 | Utilities | \$ 4,200 |
| 0 | Materials | \$ 2,400 |
| 0 | Outside Services | \$ 1,903 |
| 0 | Equip. Replacement | \$ 4,697 |

Total Annual OM&R \$31,200

User charges must generate sufficient revenue to offset the costs of OM&R.

C. <u>User Charge System</u>

As can be seen in B above, total annual OM&R costs for the Village of Marengo Wastewater System is \$31,200.

Tables 1 and 2 detail the costs per user class attributable to system OM&R. Table 3 illustrates that, for an Average Monthly User Charge of \$14.53 per equivalent user, sufficient revenue is generated to support the annual OM&R requirements of the Village of Marengo.

TABLE 1 ANNUAL COSTS BY USER CLASS VILLAGE OF MARENGO, OHIO

| User Class | # Equivalent Users | Cost/Mo. | Annual Cost |
|---------------|--------------------|-------------|--------------|
| Residential | 120 | \$ 1743.02 | \$ 20,916.92 |
| Commercial | 35 | 508.38 | 6,100.77 |
| Institutional | 24 | 348.51 | 4,182.31 |
| | | TOTAL COST: | \$ 31,200.00 |
| | | TOTAL COST: | \$ 31,200.00 |

Total OM & R budget per Facilities Plan is \$31,200.00.

Treatment Cost by User Class Village of Marengo, Ohio

| | FIOW | 800 | | SS | | Total |
|-------|-----------------------------------------------------------|------------|---------|---------------|----------|--------------|
| ADF | DF Cost/Day LBS/Day Cost/Day LBS/Day Cost/Day Annual Cst. | BS/Day Cos | st/Day | BS/Day | Cost/Day | Annual Cst |
| | | | | | | |
| 0.027 | 32.53 | 27.33 | 12.30 | 32.00 | 12.15 | \$ 20,916.92 |
| 0.008 | 9.65 | 8.11 | 3,65 | 9.49 | 3.60 | 6,100.77 |
| 0.005 | 6.62 | 5.56 | 2.50 | 6.51 | 2.48 | 4,182.31 |
| | | 1 | | | | |
| 0.040 | 48.80 | 41.00 \$1 | \$18.45 | 48.00 \$18.23 | \$18.23 | \$ 31,200.00 |
| | | | | | | |
| | *************************************** | | | | | |
| | | | | | | |

TABLE 3
REVENUE GENERATED BY USER CLASS
VILLAGE OF MARENGO, OHIO

EQUIVALENT

REVENUES

ANNUAL

| USER CLASS | # USERS | USERS | GENERATED/MO. | REVENUE | |
|---------------|---------|---------------|---------------|-------------|--|
| Residential | 120 | 120 X 14.53 | \$ 1743.60 | \$20,923.20 | |
| Commercial | 35 | 35 X 14.53 | 508.55 | 6,102.60 | |
| Institutional | 33 | 24 X 14.53 | 348.72 | 4,184.64 | |
| | | | | | |
| | | TOTAL REVENUE | S GENERATED: | \$31,330.49 | |

Total OM & R budget per Facilities Plan is \$31,200.00.

TABLE 4 VILLAGE OF MARENGO WASTEWATER TREATMENT FACILITY REPLACEMENT COSTS

I. Lift Station

| | | ge Life ncy (Yrs) | | eplacement Costs (\$) | Rep | Annual Lacement Costs |
|------|----------------------------------------------------------|----------------------------------------|---------|-----------------------------------------|----------|-------------------------------------------------|
| | 2-pumps Guide Rails 3-4" Plug 2-4" Check Floats Controls | 15 30 30 30 30 30 20 | \$ | 6,000 500 750 500 150 80 | \$ | 400 17 25 17 5 40 504/Yr x 2= |
| | | | | | \$ | 1,008/Yr |
| II. | Collection Syst | em | | | | |
| | Septic Tank | 40 | \$ | 71,180 | \$ \$ | 1,779 1,779/Yr |
| III. | Plant | | | | | |
| | Aerators Plug Valves Decanters Waste Sludge | 15 15 15 | \$ | 10,000 750 4,000 | \$ | 667 50 266 |
| | Pump Flow Meter Well Plant Lift | 15 15 20 | | 1,500 2,500 700 | | 100 167 35 |
| | Station Pump Floats Controls | 15 30 20 | | 1,250 150 800 | \$ | 83 5 40 1,413/Yr |
| IV. | Lab | • | | | | |
| | Water Heater Furnace Potable | 15 15 | \$ | 200 700 | \$ | 13 47 |
| | Pressure Tank Softner Recorder Generator | 20 15 15 30 | | 200 700 700 10,000 | \$ | 10 47 47 333 497/Yr |
| | | | GRAND 1 | COTAL | \$ | 4,697/Yr |

TABLE 5 CALCULATION OF STRENGTH SURCHARGE VILLAGE OF MARENGO, OHIO

A. Strength Surcharge (BOD)

SS(BOD) = A/B * C (where)

A = Annual Cost for BOD Treatment (See Table 2)

B = Lbs. of BOD/day - design loading

C = Time Period

SS(BOD) = \$6,710/41 lbs/day * 365 days = \$0.45/lb

B. Strength Surcharge (S.S.)

SS(ss) = A/B * C (where)

A = Annual Cost for SS Treatment (See Table 2)

B = Lbs. of SS/day - design loading

C = Time Period

SS(ss) = \$6,710/48 lbs/day * 365 = \$0.38/1b

TABLE 2 TREATMENT COSTS BY USER CLASS VILLAGE OF MARENGO, OHIO

| User Class | #Eq. Users | Flow | BOD | SS | Total Cost |
|---------------|------------|----------|-----------|---------|---------------|
| Residential | 118 | 11992.67 | 4489.50 | 4434.75 | \$ 20916.92 |
| Commercial | 35 | 3454.52 | 1332.25 | 1314.00 | 6100.77 |
| Institutional | 24 | 2364.61 | 912.50 | 905.20 | 4182.31 |
| | | | | | |
| | | TOTAL A | NNUAL COS | T: | \$31200.00 |

VILLAGE OF MARENGO OEPA COMMENTS OF JANUARY 30, 1989

I. USER CHARGE SYSTEM

- A.1) An "equivalent user" is the comparison of the anticipated wastewater flow from a facility (i.e., school, commercial establishment, etc.) to a standard residential unit, which is established at one (1) equivalent. This comparison is utilized to establish flat rate charges for wastewater service where central water metering is not available as a basis for sewer bills.
- A.2) a. The contract labor is the labor required to maintain and operate the collection system and treatment plant. The labor will be contracted to a larger community since a full time person would be required.
 - b. The utility cost referes to electrical energy used for the treatment and transportation of the wastewater.
 - c. The materials included the cost of chlorination and dechlorination tablets and laboratory supplies (such as reagents, glassware, filter paper and probes).
 - d. The outside services include the cost of septice tank pumping and laboratory testing for process control and EPA reporting requirements.
 - e. See attached UCS revisions for replacement schedule.
- A.3) See attached UCS revisions for Calculation of Strength Surchages.
- A.4) We believe that a contingency amount is contained within the individual line items and that the budget will be sufficient. Please advise if this contingency amount should be identified as such.
- A.5) On a flat rate-equivalent user basis the total annual OM & R costs must be offset by total annual revenue from users. The annual OM & R budget of \$31,200 must be shared by 179 equivalent users. Therefore:

(Total (OM&R) / 12 months)/Total Eq. Users = AMUC

or

(\$31,200 / 12 months)/Total Eq. Users = AMUC

VILLAGE OF MARENGO OEPA COMMENTS OF JANUARY 30, 1989 (Cont.)

- A.6) See attached UCS revisions Table 2.
- A.7) Design Loadings for the Marengo WWTP are as follows:

Avg. Flow - Gal/day - 38,000

Peak Flow - Gal/day - 130,000

BODs - (mg/1) - 130 - (#/day) - 41

SS - (mg/1) - 160- (#/day) - 48

NH3 - N - (mg/1) - 30 - (#/day) - 6.2

- A.8) Agreed see revised UCS.
- A.9) See attached.
- B.1 -
- B.4) Attached are SUO pages 3,4,6 and 13 revised as directed.

II. A/E Contract

- A.1) A revised contract utilizing 40 CFR Part 31 references and Model Subagreement provisions has been previously forwarded to PCU (Linda Hoff) for review and approval.
- A.2) The project timeframe is 29 months.
- B.1) C390876-01 is included.
- B.2-
- B.7) Date supporting the 5700-41 for is attached.

III. URA

A. Attached for your review is the information sheet to be provided as the "initial notice to property owners."

VILLAGE OF MARENGO OEPA COMMENTS OF JANUARY 30, 1989

IV. SM/WBP

A. The 5700-41 for the Marengo Project includes the following:

MBE - \$12,100 (10%) WBE - \$ 2,400 (2%)

All contract documents will contain the appropriate requirements.